

Installations and medium combustion plant and specified generator permits: ask for pre-application advice

Will or does your activity take place in England?

Yes

What is your main activity?

Using, treating, storing or disposing of waste or mining waste, an industrial process, intensive farms, manufacturing or any other business that produce potentially harmful substances.

Do you want to know more about permit applications for the following types of activities, known as 'A1 installations' or are you carrying out a medium combustion or specified generator activity?

If yes, select which category your main activity will or does fall into. If no, select 'none of the above'.

Waste management: incineration and co-incineration of waste, landfills, other forms of disposal of waste, recovery of waste, temporary or underground storage of hazardous waste and treatment of waste water.

What is or will be your main A1 installation activity that you need pre-application advice about?

Biological treatment (anaerobic and aerobic digestion, composting in open windrows or in vessel, mechanical and biological treatment) of hazardous waste (greater than 10 tonnes/day) or non hazardous (greater than 75 tonnes a day or 100 tonnes a day if only treatment is anaerobic digestion)

What type of permit application do you want pre-application advice about?

A change (variation) to an existing permit

Would you like us to carry out a free nature and heritage conservation screening for you to consider as part of your application?

You should request this if you're applying for a new site close to a protected site or species, because: some types of permit may not be allowed, such as a standard rules permit you may have to carry out a risk assessment

Yes

Which type of permit would you like to apply for?

Substantial variation to an installation bespoke permit

Do you have an existing Environment Agency permit or pre-application reference? It's usually in the format EPR/AB1234CD/A001.

I have an existing permit reference

Enter your reference, if you have one.
EPR/EP3894SC/V008

What is your role?

Consultant or agent

Your full name

Graeme Outridge

Your email address

graeme@wisergroup.co.uk

Your telephone number

01480462232

The applicant or business name

Fernbrook Bio

Company number (if the applicant has one)

06595831

What is the applicant's address?

Building or street Rothwell Road
Town or city Kettering
County Northamptonshire
Postcode NN16 8XF

What is the site name?

Fernbrook Bio

What is the address of the site?

Building and street Rothwell Road
Town or city Kettering
County Northamptonshire
Postcode NN16 8XF

What is the National Grid reference for the centre of the site or the centre of the emission point(s)? This should be 2 letters and 10 digits, such as ST 58132 72695.

SP 82384 80129

What is the distance from the central grid reference to the installation or activity boundary in metres? (if MCP&SG mark as n/a)

60

The Environment Agency can give free basic pre-application advice on: which application forms you should use what guidance you must follow how much you will need to pay if there are standard rules relevant to your activities and if you meet the criteria for them risk assessments you may need to complete and send with your application the administrative tasks the Environment Agency may need you to do as part of your application Do you need any more advice that is not mentioned here?

Yes

If you need more in depth advice about your application, the Environment Agency offers an enhanced pre-application advice service. The enhanced service costs £100 an hour plus VAT. This could cover advice on: the type of permit you need complex modelling preparing risk assessments parallel tracking for complex permits with planning applications specific substance assessments monitoring requirements (including baseline) what guidance you must follow before you submit your application complex application charge questions public engagement plans for high public interest applications requirements of nationally significant infrastructure projects Do you need this enhanced pre-application advice service?

Yes

What chargeable pre-application advice do you need? Try to include any specific technical questions you would like to ask us.

N.B. Following the change in ownership at the beginning of the year, there is an outstanding admin variation currently undergoing determination (submitted Feb 2022).

Detailed design drawings are not yet available but permit variation is required to be submitted by end of July 2022 to permit continued use of thermal oxidiser (for odour abatement) currently operated under Local Enforcement Position that cannot be extended again. Planning application will be twin tracked.

Planned expansion works to include:

- Increase annual throughput from 49,000 to 100,000 tonnes
- Replace reception building odour abatement system with extraction and carbon filtration
- Additional emission point (12m stack)
- Permanent use of upgraded thermal oxidiser to treat odourous gases for pasteuriser and buffer tanks
- Additional tanks: pasteuriser, buffer(s), digester, storage
- Gas upgrading for grid injection
- Reception building expansion – plus additional feedstock line
- Sealed roof for storage tank
- Ancillary equipment & pipework modifications/upgrades

Please confirm what application documents and further technical assessments will be required (including noise and emissions), in addition to the fees for the expected substantial variation to the existing Installation Permit.

The information you give in this form will not appear on the public register in accordance with our privacy notice (opens in a new window) but may be made available (disclosed) under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004 when requested. More information can be found on the Information Commissioner's Office website (opens in a new window)

Is there an exception to disclosure under the above mentioned legislation which applies to any of the information you have given in this form?

No

Give your feedback

Overall, how did you feel about completing this form today?

Satisfied

Clark, Wayne

From: PreApplication Service <preapplicationservice@environment-agency.gov.uk>
Sent: 23 June 2022 06:45
To: Graeme Outridge
Subject: Enhanced pre-application advice request - Fernbrook Bio Limited - EPR/EP3894SC/V007

Dear Graeme

We have received your request for enhanced pre-application advice for an environmental permit application.

A permitting officer will review your request and contact you to discuss the next steps.

Kind regards

Hayley Korczynski
Permitting Officer | Waste Pre-application Service, National Permitting Service
Environment Agency | Quadrant 2, Parkway Business Park, Sheffield, S9 4WF

pre-applicationservice@environment-agency.gov.uk

Pronouns: she/her ([why is this here?](#))



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Graeme Outridge
Fernbrook Bio Limited
Rothwell Road
Kettering
Northamptonshire
NN16 8XF

Our Ref: EPR/EP3894SC

Date: 18 July 2022

Dear Graeme

Pre-application advice

I am pleased to provide you with your pre-application advice for Fernbrook Bio Limited as requested. With reference to your queries, we have provided you with the following information:

Application charge required	See Appendix 1 below
Forms required to be submitted	See Appendix 1 below
Additional documents required	See Appendices 1 & 2

The advice given is based on the information you have provided, and does not constitute a formal response or decision of the Environment Agency with regard to future permit applications. Any views or opinions expressed are without prejudice to the Environment Agency's formal consideration of any application. Please note that any application is subject to a full technical check during duly making and determination, and additional information may be required based on your detailed submission and site specific requirements.

Your completed application can be sent via email to psc@environment-agency.gov.uk

Or by post to

Permitting Support Centre, Quadrant 2, 99 Parkway Avenue, Sheffield, S9 4WF

A complete application must contain the following information below:

Installations

Declaration	Please ensure the declaration section is completed by each relevant person. For a limited company, this must be a director/company secretary as listed on Companies House.
Site plans and drawings (site plan, site layout plan, site drainage plan, design drawings etc)	Site plan must be clearly marked with the full site boundary. The site plan should have the following features: <ul style="list-style-type: none">• Boundary reasonably accurate and in acceptable format and clearly identified• Emissions points clearly shown on the plans• Other geographic features (roads, rivers etc.) identified• Scale indicator included• OS NGR indicated Other features: Site drainage plans (https://www.gov.uk/guidance/develop-a-management-system-environmental-permits), site layout plans, plant design drawings should be provided.
Environmental Management System	include a summary of your management system. Link to guidance: https://www.gov.uk/guidance/develop-a-management-system-environmental-permits

Non-technical summary	The application must contain a simple explanation of what the proposed changes to the existing permit. This should include a summary your operations, a summary of the key technical standards and control measures arising from your risk assessment.
Technical description and BAT Assessment	Read the technical guidance for your sector and include a BAT assessment against your proposed techniques. See Appendix 2
Process Flow Diagrams	Include process flow diagrams where there have been changes on site – see Appendix 2
Risk Assessments and associated management plans	See Appendix 2 H1 – air, land and water https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit Risk assessments for odour, noise & vibration and the impacts on sensitive receptors: Risk assessments for your environmental permit - GOV.UK (www.gov.uk)
Habitats Assessment	The application should identify all habitat sites (SAC, SPA, RAMSAR, SSSI, MCZ) sites, protected species and non-statutory conservation sites i.e. Local Wildlife Sites, National Parks, Ancient Monuments, AONB etc. Assess the impact of facility on the sites – emissions to air and water, noise and dust impacts etc. The application must contain the results an assessment of impacts at: <ul style="list-style-type: none"> • SAC, SPA and Ramsar sites within 10 km • SSSI sites within 2 km • Local wildlife sites, ancient woodland, national nature reserve and local nature reserve sites within 2 km See link for information on Screening for Protected conservation areas: Air emissions risk assessment for your environmental permit - GOV.UK (www.gov.uk)
Lists of Wastes and evidence of ongoing Technical Competency	See Appendix 2
Payment	Please note your application will not be processed until we receive the full payment.

If you have any questions, please call 03708 506 506.

Yours sincerely,

Sue Anderson
Principal Permitting Officer
National Permitting Service
susan.anderson@environment-agency.gov.uk

Appendix 1 – Information to support permit application

Please use the requirements stated within the application forms (see below) as a guide to what accompanying documents are needed with your variation application.

Bespoke installation requirements

- **Application forms**

The following forms are required for a substantial variation application for a bespoke installation:

- Form A (about you), available here:

<https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-a-about-you>

- Form C2 (varying a bespoke permit), available here:

<https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-c2-varying-a-bespoke-permit>

- Form C3 (change an installation permit), available here:

<https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-c3-varying-a-bespoke-installation-permit>

- F1 (charges, declarations), available here:

<https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-f1-opra-charges-declarations>

- **Application charge**

Please see the following link for guidance on when and how you are charged: <https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-permitting-charges-guidance>

For a link to the charging scheme, click [here](#)

The substantial variation application fee would be calculated as follows:

Permit application fee		
Charge	Amount (£)	Line in scheme
Section 5.4 (a)(i) and (b)(i) - Non-hazardous waste installation – biological treatment.	£12,586	1.16.2.1

Add-on fees		
Charge	Amount (£)	Line in scheme
Odour management plan	1,246	1.19.6
Noise & Vibration management plan	1,246	1.19.7

Appendix 2 - Supplementary biological treatment basic pre-application advice

This document provides supplementary basic advice for biological (biowaste) treatment activities and is in addition to the general advice document also provided. Biological treatment activities include; anaerobic digestion, composting (open windrows and in vessel composting), aerobic digestion and mechanical and biological treatment.

How much will my permit cost?

In addition to the information about application charges given in the general advice document, this section is intended to give more activity specific advice which might help you to provide the correct charge for your application.

Baseline charge

The application charge depends on the type of biowaste treatment activity that is proposed.

For **new bespoke applications** where the biowaste treatment activity is the primary activity, the application charges are as specified below:

- Section 5.3 (a)(i) - hazardous waste installation – biological treatment (charging ref. 1.16.1.1) – **£16,001.**
- Section 5.4 (a)(i) and (b)(i) - non-hazardous waste installation – biological treatment (charging ref. 1.16.2.1) – **£13,984.**

The charge will comprise the full application charge for the first activity and then 10% of the relevant application charge for the same activity carried out multiple times.

Where any of the activities above are carried out as a secondary activity to a higher charge paying activity (for example, a hazardous waste treatment activity), the application charge will comprise the full charge for the primary activity and 50% of the relevant application charge for any secondary activities that can reasonably be considered to be part of the same operation. Please see section 2.12 of the charging guidance.

Where a waste operation (non-listed activity) is being carried out as a secondary activity to any of the biowaste treatment activities, the application charge will comprise the full charge for the primary activity and 50% of the relevant application charge for the Waste operation activity.

The application charge for an associated Effluent Treatment Plant (ETP) that treats effluent derived from the biowaste treatment activity is 10% of the relevant application charge.

For variation applications, the charge will be dependent on the type of variation (minor technical, normal or substantial). The scope of the variation types are described in section 3 of our [charging guidance](#). The charges for each type of variation can be found in table 1.6 of our table of [Charging Scheme](#).

As described in our [charging guidance](#), the following points should be taken into account when calculating your variation charge.

1. If you want to vary a permit that covers more than one activity you must pay a variation charge for each activity you want to vary. If the change affects other activities on the same permit, that means they will also need to be changed. You will need to pay a variation charge for each of the other activities affected.
2. If you have a permit that covers the same activity multiple times, you pay a variation charge when changing each repeat activity. However, if you want to make the same change, at the same time, to a second or subsequent repeat activities, you do not need to pay another variation charge.

This is because the changes to the second or subsequent repeat activities are regarded as administrative changes which are free of charge.

3. If you have a permit that covers multiple activities and you apply to change any plant or infrastructure (for example replacing the boilers, or extending the site boundary), you pay the highest variation charge of the activities affected. Any changes to the other activities are then regarded as administrative variations and will be free of charge. This applies if it is a minor, normal or substantial variation.
4. If you want to add an activity to your permit, you must pay the charge for a new permit application for that type of activity.

Add-on charges

We have identified odour emissions, pests, fire, noise and dust emissions as key issues for these activities. Depending on the findings of your risk assessment, it is possible that some or all of the following add-on charges may apply in addition at the baseline application charge:

- Odour management plan – a fixed charge of £1,246.
- Noise and vibration management plan – a fixed charge of £1,246.
- Emissions management plan (dust) – a fixed charge of £1,241.
- Pests management plan – a fixed charge of £1,241.
- Fire prevention plan – a fixed charge of £779.

Supporting information specific to biological treatment activities

H1 risk assessment

The H1 Environmental Risk Assessment should follow the methodology set out in Environment Agency guidance: <https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit>

Requirements include:

- Identification of emission points and pollutants released from the proposed facility (all emissions to air from combustion plant – CHP engine, boiler and biogas upgrading plant)
- Effective stack heights should be stated (accounting for buildings if applicable) and emissions rates stated
- Quantification of pollutants (worst case concentrations should be assumed) and emission rates using actual measurements or if not available estimations (justification required)
- Use of background pollutant levels (justification required)
- Calculation of pollutant concentrations and comparison against relevant EQS/EAL
- Emission Limit Values proposed. Or if they are not proposed, justification should be provided.

Air dispersion modelling

Where air dispersion modelling has been submitted, the model input files must be provided with the application.

The applicant must provide emission parameters (in accordance with

<https://www.gov.uk/guidance/environmental-permitting-air-dispersion-modelling-reports>

Technical description and BAT assessment

The application should contain the following technical aspects:

- A demonstration of BAT measures should be provided with sufficient evidence justifying that BAT has been applied for example, treatment technology, equipment choice, abatement technology, energy efficiency, raw material usage.

The operational procedures should comply with the Waste Treatment BAT Conclusions as described in the Commission Implementing Decision¹ and the BAT Reference Document for Waste Treatment (the BREF)².

It would be helpful to present the BAT assessment in a tabular format – a comparison of the relevant BAT points and how the installation complies with the BAT points.

- Any departure from the Waste Treatment BREF /BAT Conclusions should be fully justified in the application. Where needed, a cost benefit analysis of different options, in line with Environment Agency Guidance should be provided: <https://www.gov.uk/guidance/best-available-techniques-environmental-permits>
- A description of the abatement techniques for all necessary substances and receptor media
- An assessment of energy usage /efficiency techniques
- Monitoring frequencies, standards and proposals including MCERTS
- Raw materials inventory and annual throughput
- Raw material usage efficiency techniques
- Raw material storage arrangements
- Digestate /compost storage capacity and contingency plans
- List all the waste codes proposed for the facility, using the EWC Catalogue. Justification for the use of 99 codes must be provided where appropriate.
- A description of the proposed waste handling (including storage and segregation).
- A review of waste minimisation at the facility.

Odour Management Plan

As set out in our [guidance on controlling odour emissions](#), we consider biological treatment activities as high risk for odour. This means that for new application you need to provide a standalone Odour Management Plan (OMP) for assessment. Particular attention must be paid to odour containment, effectiveness of abatement plant and design and you should follow the [H4 guidance](#)

We have provided you with a copy of our OMP template with this advice. The template has been designed to cover the aspects of your operations that we will assess. You do not have to use this template, but if you do and provide all the information requested, it makes it more likely that your OMP will be accepted.

The template is periodically updated and improved. If there is delay between you receiving the template as part of your pre-application advice and you preparing your plan for a permit application, we recommend you contact the Environment Agency odour team to request the most up-to-date version of the OMP template. You can request the template from odourteam@environment-agency.gov.uk

For **variation applications**, a new or updated plan will be required if your risk assessment shows that the changes will lead to increased odour risk.

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018D1147&from=EN>

² http://eippcb.jrc.ec.europa.eu/reference/BREF/WT/JRC113018_WT_Bref.pdf

Primary and secondary containment

A detailed assessment of site infrastructure should be provided (e.g. secondary containment, tank specification, surfacing, storage lagoon etc.). The site infrastructure should be compared with the relevant industry /construction standards (e.g. CIRIA guidance C736 for secondary containment and C535 for above-ground tanks etc.).

The assessment should include:

- The physical condition of primary containment systems (storage and treatment vessels), secondary containment (bunds), loading and unloading areas, transfer pipework/pumps, temporary storage areas and liners underlying the site.
- The suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure;
- Any work required to ensure compliance with the industry standards or equivalent; and
- A preventative maintenance and inspection regime for site infrastructure.

Dust

As set out in our [guidance on controlling dust, mud and litter](#), we consider biological treatments activities as high risk for dust and particulates. This means that depending on the outcome of your risk assessment you may need to provide a standalone Dust Management Plan (DMP) for assessment. We have provided you with a copy of our DMP template with this advice. The template has been designed to cover the aspects of your operations that we will assess. You do not have to use this template, but if you do and provide all the information requested, it makes it more likely that your DMP will be accepted.

The template is periodically updated and improved. If there is delay between you receiving the template as part of your pre-application advice and you preparing your plan for a permit application, we recommend you contact the Environment Agency air quality team to request the most up-to-date version of the DMP template. You can request the template from air.quality@environment-agency.gov.uk

Bioaerosols risk assessment

A bioaerosols site-specific risk assessment (SSBRA) will be required where:

- The operational area including abatement plant is located within 250 metres of sensitive receptors; or
- Where area or point source emissions may pose a risk to the nearest sensitive receptor's location.

The SSBRA must demonstrate that the process and/or abatement measures adequately prevent or where this is not possible significantly reduce the risk of bioaerosols release and that the resulting activity will be unlikely to expose the nearest sensitive receptor to elevated concentrations of bioaerosols. The detail and level of risk assessment must be site specific, process and location dependant. To control and minimise the risks identified, measures and process controls must be in place and clearly stated.

There is an additional charge associated with the assessment of bioaerosols risk assessment.

Link to technical guidance:

<https://www.gov.uk/government/publications/bioaerosol-monitoring-at-regulated-facilities-use-of-m9-rps-209>

<https://www.gov.uk/government/publications/m9-environmental-monitoring-of-bioaerosols-at-regulated-facilities>

Process flow diagrams

The application should contain process flow diagrams for treatment processes on site.

List of wastes

Waste streams which are considered acceptable are specified in the anaerobic digestion standard rules permit templates on GOV.UK. Any other waste streams should be accompanied by a robust justification which is in accordance with the Environment Agency Framework for assessing suitability of wastes going to anaerobic digestion, composting and biological treatment, Framework Guidance Note (2013).